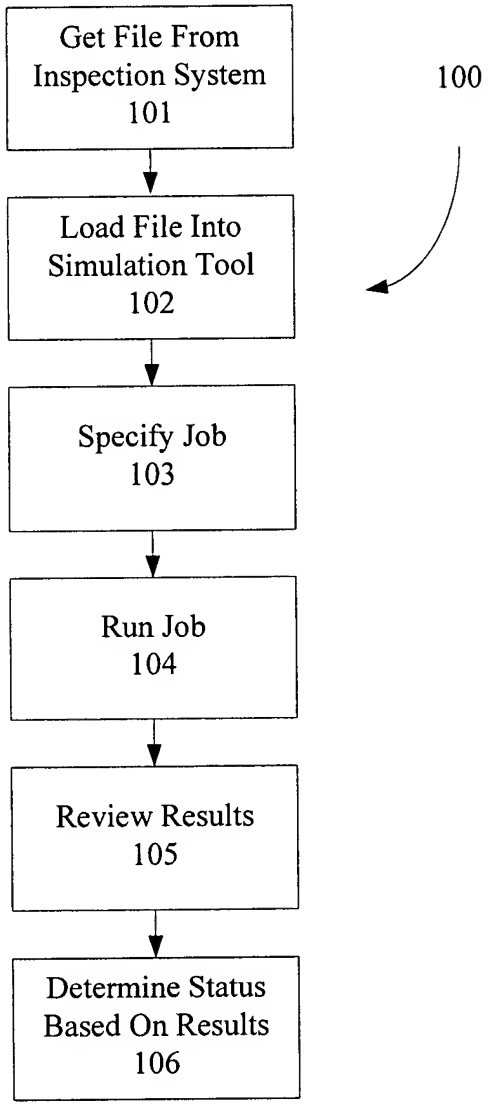

Figure 1A

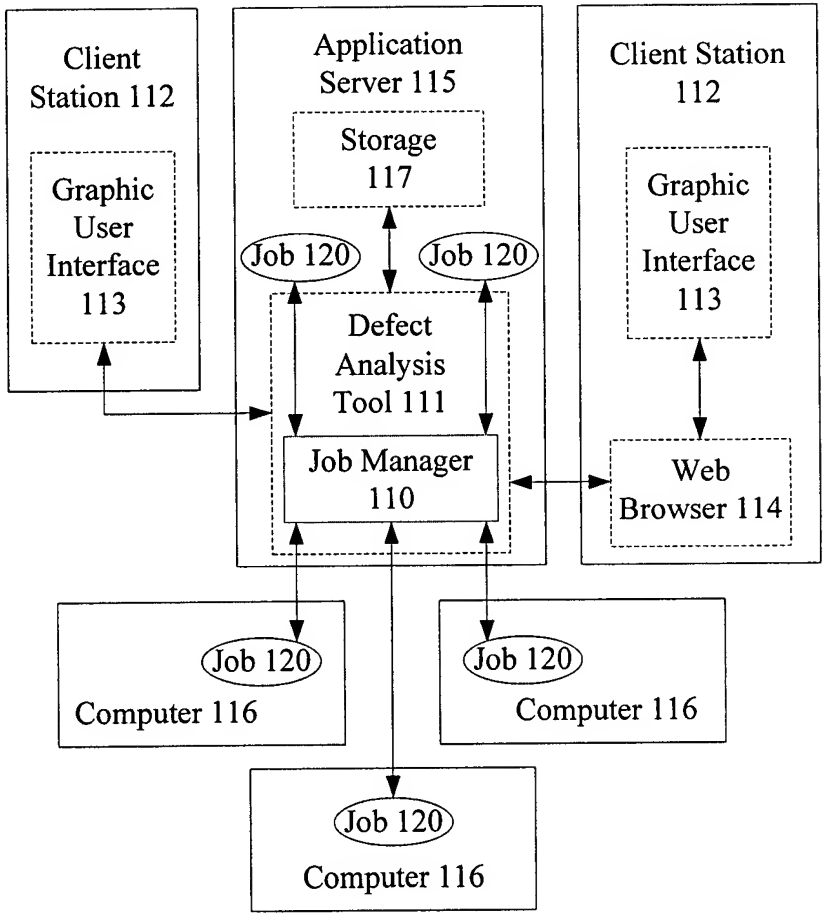

Figure 1B

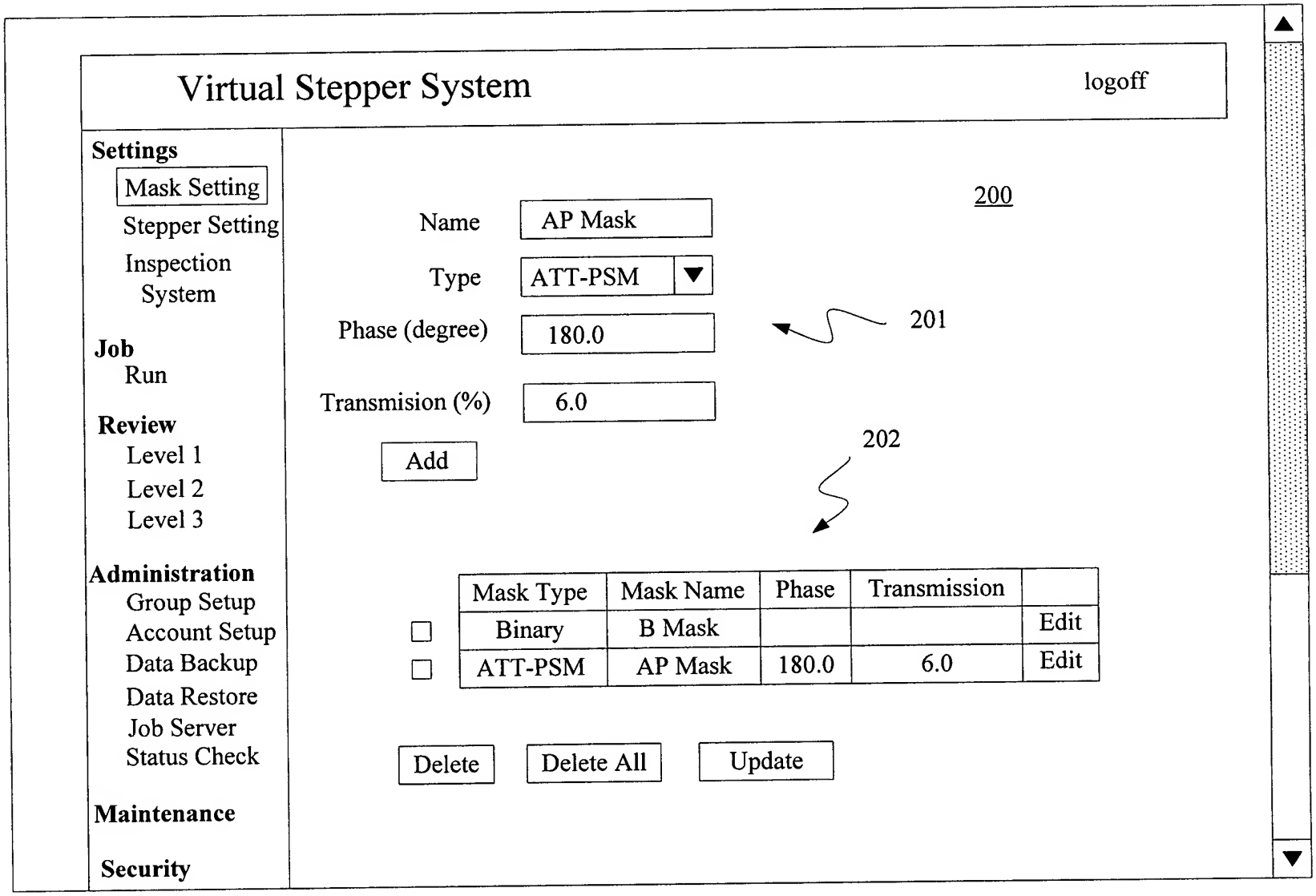
Virtual Stepper System
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
200
Name
AP Mask
Type
ATT-PSM
Phase (degree)
180.0
201
Transmision (%)
6.0
Add
202
Mask Type
Mask Name
Phase
Transmission
Binary
B Mask
Edit
ATT-PSM
AP Mask
180.0
6.0
Edit
Delete
Delete All
Update

Figure 2

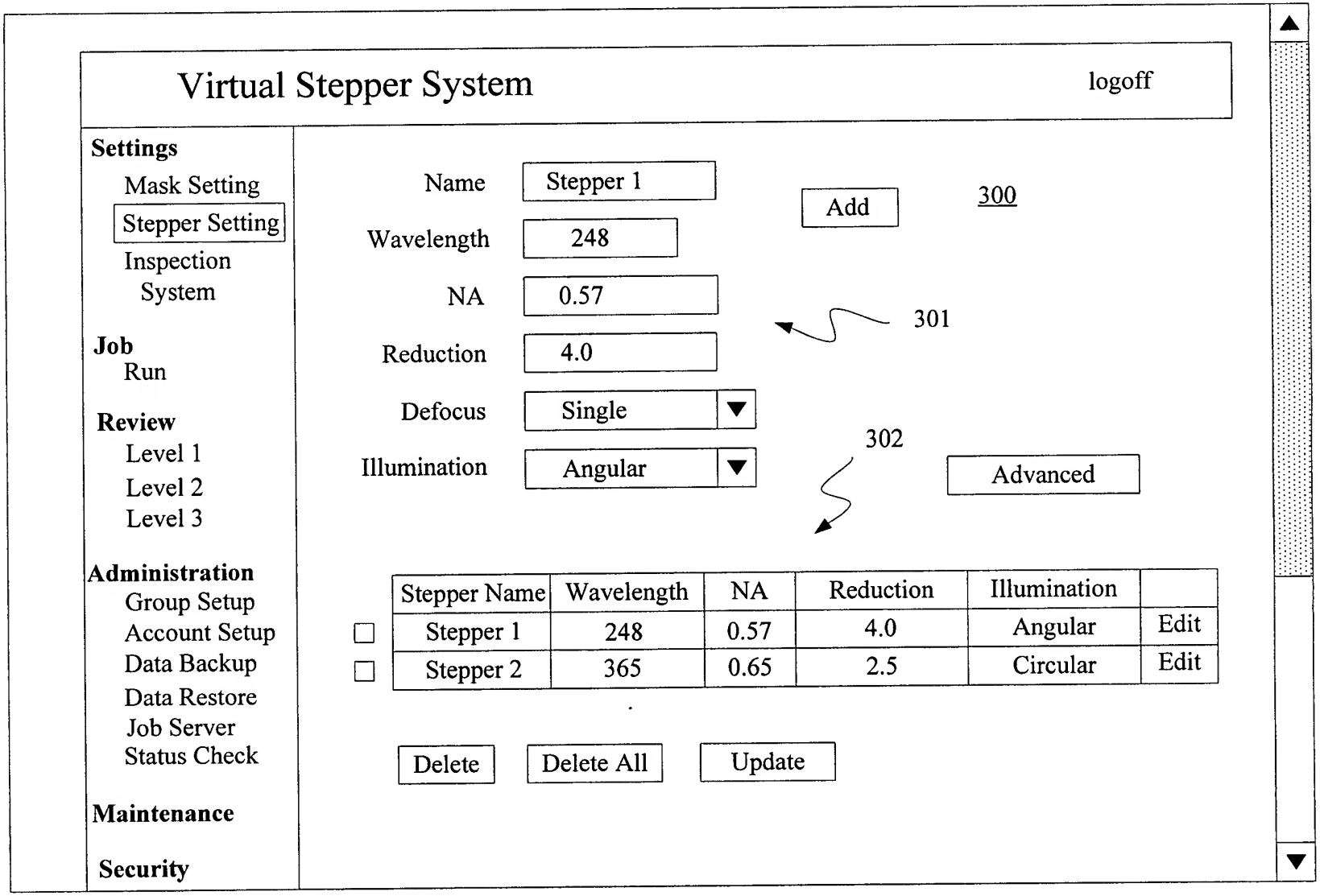
Virtual Stepper System
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
Name
Stepper 1
Add
300
Wavelength
248
NA
0.57
301
Reduction
4.0
Defocus
Single
Illumination
Angular
302
Advanced
Stepper Name
Wavelength
NA
Reduction
Illumination
Stepper 1
248
0.57
4.0
Angular
Edit
Stepper 2
365
0.65
2.5
Circular
Edit
Delete
Delete All
Update

Figure 3

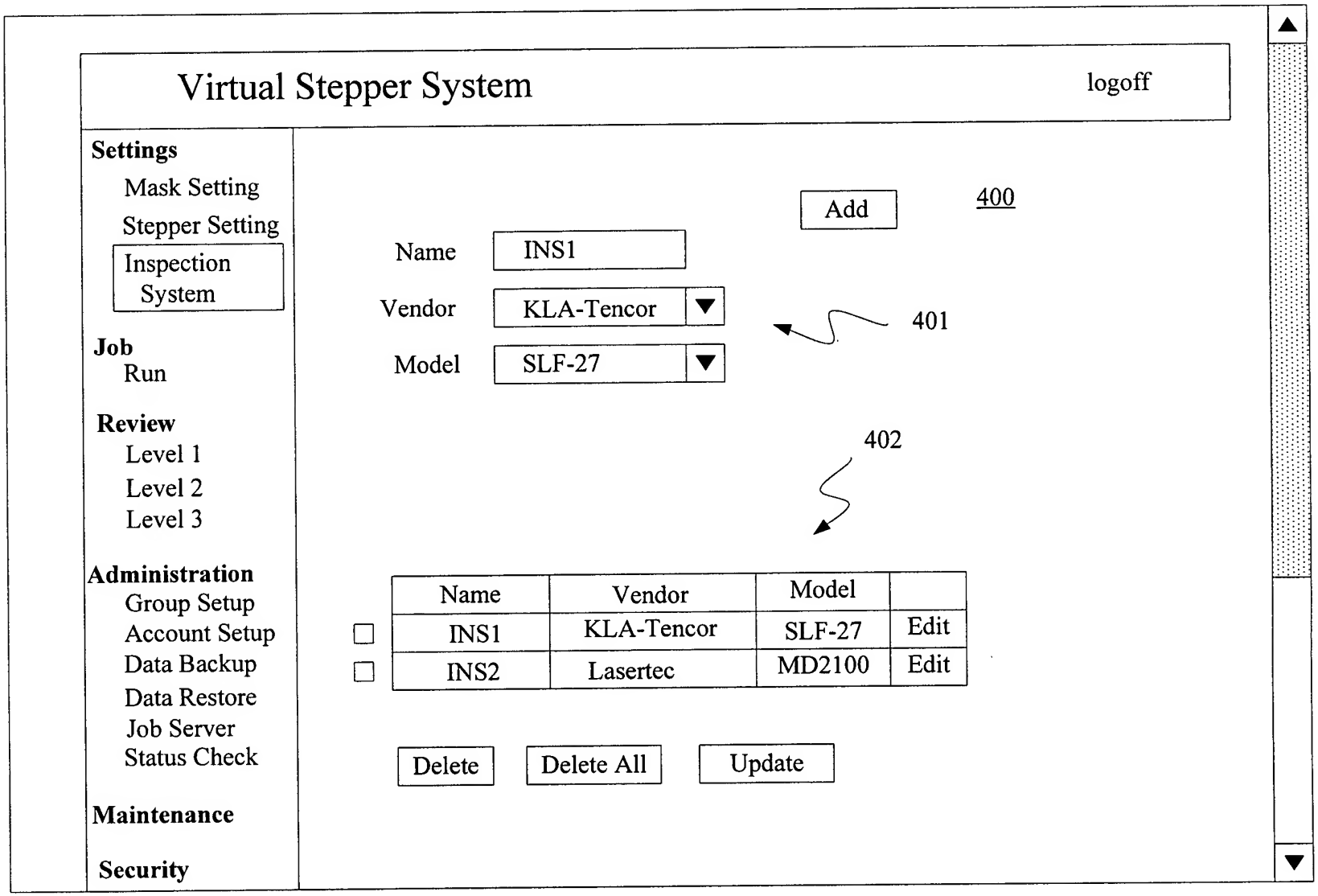
Virtual Stepper System
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
Add
400
Name
INS1
Vendor
KLA-Tencor
Model
SLF-27
401
402
Name
Vendor
Model
INS1
KLA-Tencor
SLF-27
Edit
INS2
Lasertec
MD2100
Edit
Delete
Delete All
Update

Figure 4

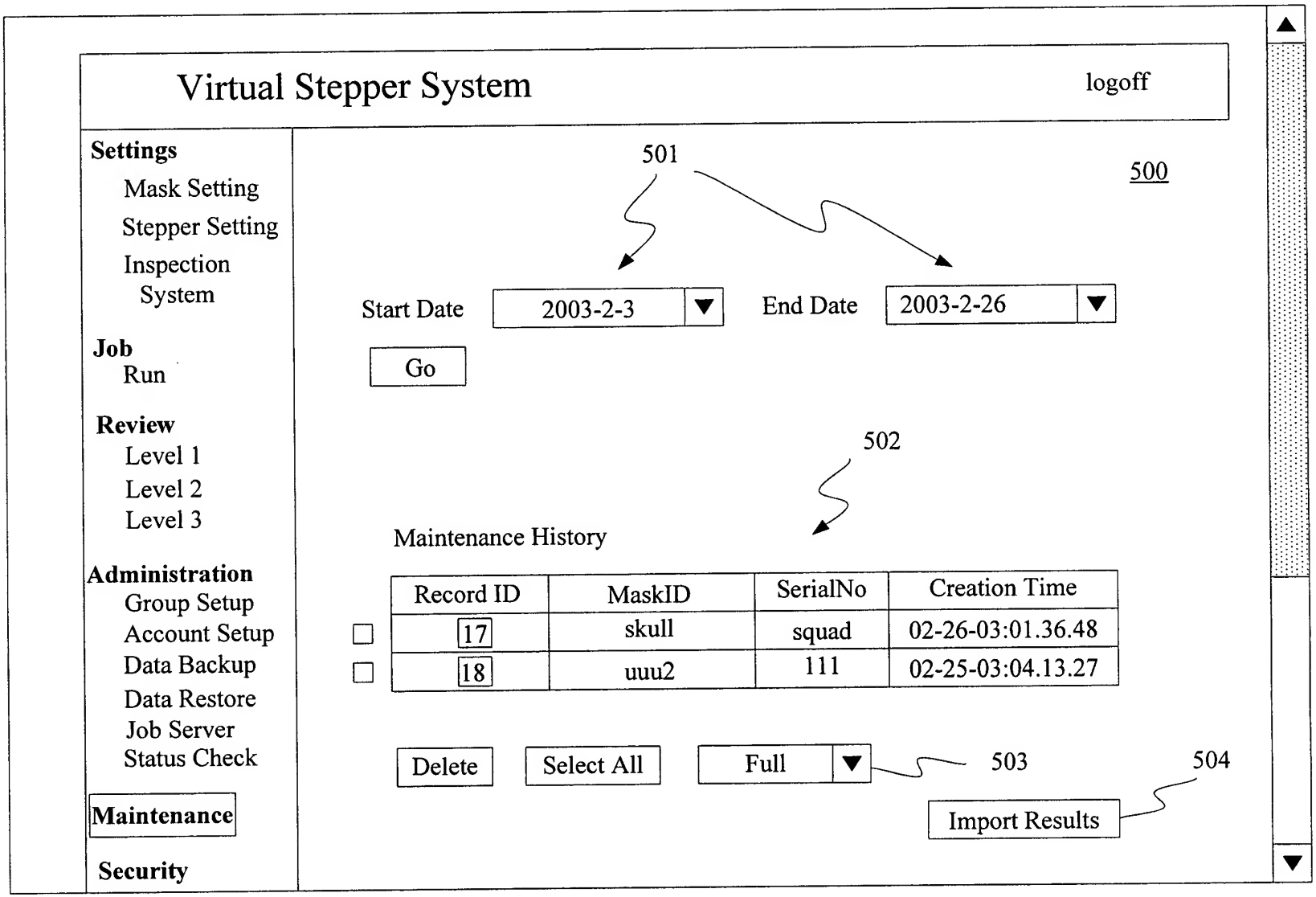
Virtual Stepper System
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
501
500
Start Date
2003-2-3
End Date
2003-2-26
Go
502
Maintenance History
Record ID
MaskID
SerialNo
Creation Time
17
skull
squad
02-26-03:01.36.48
18
uuu2
111
02-25-03:04.13.27
Delete
Select All
Full
503
504
Import Results

Figure 5

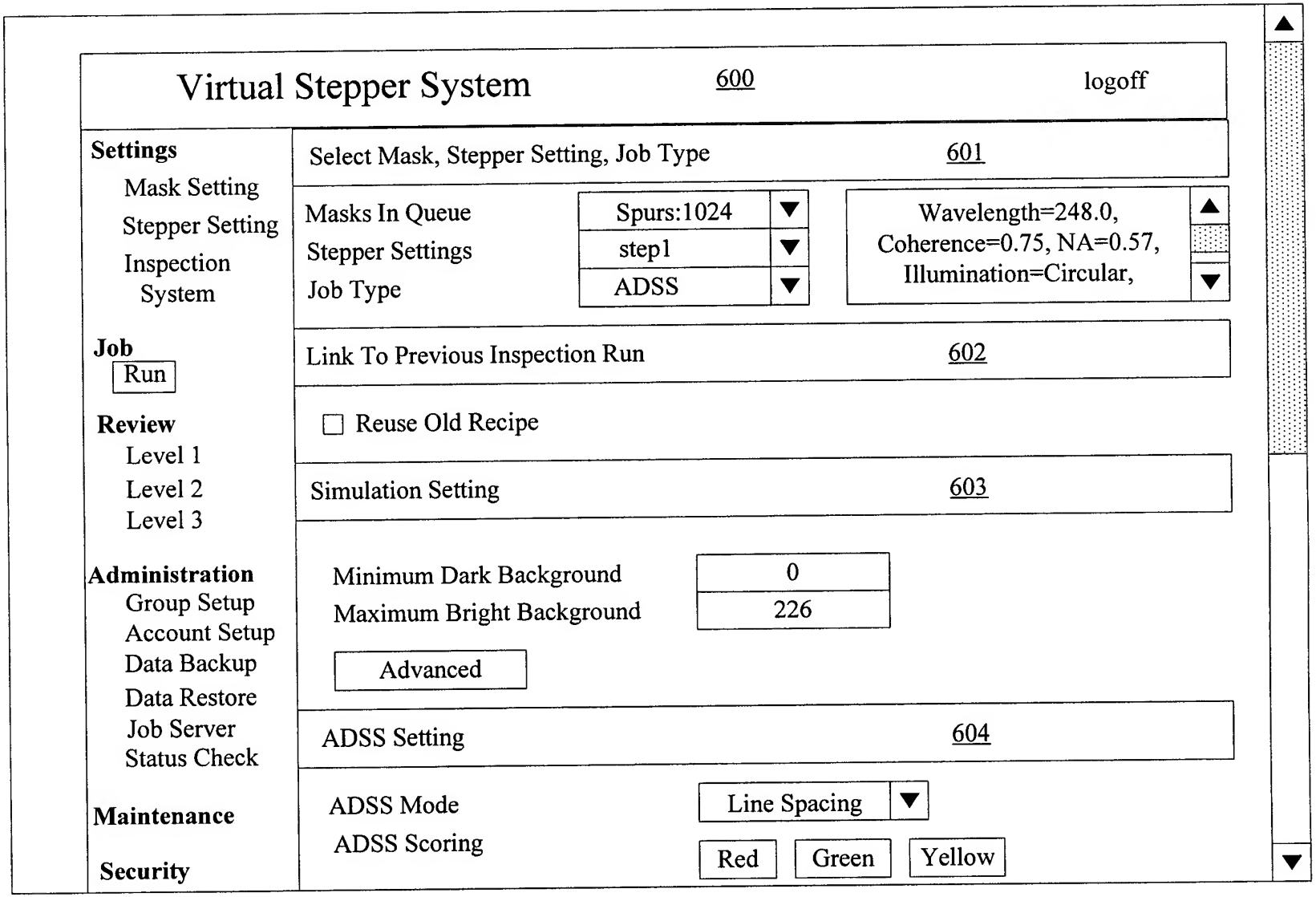
Virtual Stepper System
600
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server Status Check
Maintenance
Security
Select Mask, Stepper Setting, Job Type
601
Masks In Queue
Stepper Settings
Job Type
Spurs:1024
step1
ADSS
Wavelength=248.0, Coherence=0.75, NA=0.57, Illumination=Circular,
Link To Previous Inspection Run
602
Reuse Old Recipe
Simulation Setting
603
Minimum Dark Background
Maximum Bright Background
0
226
Advanced
ADSS Setting
604
ADSS Mode
Line Spacing
ADSS Scoring
Red
Green
Yellow

Figure 6A

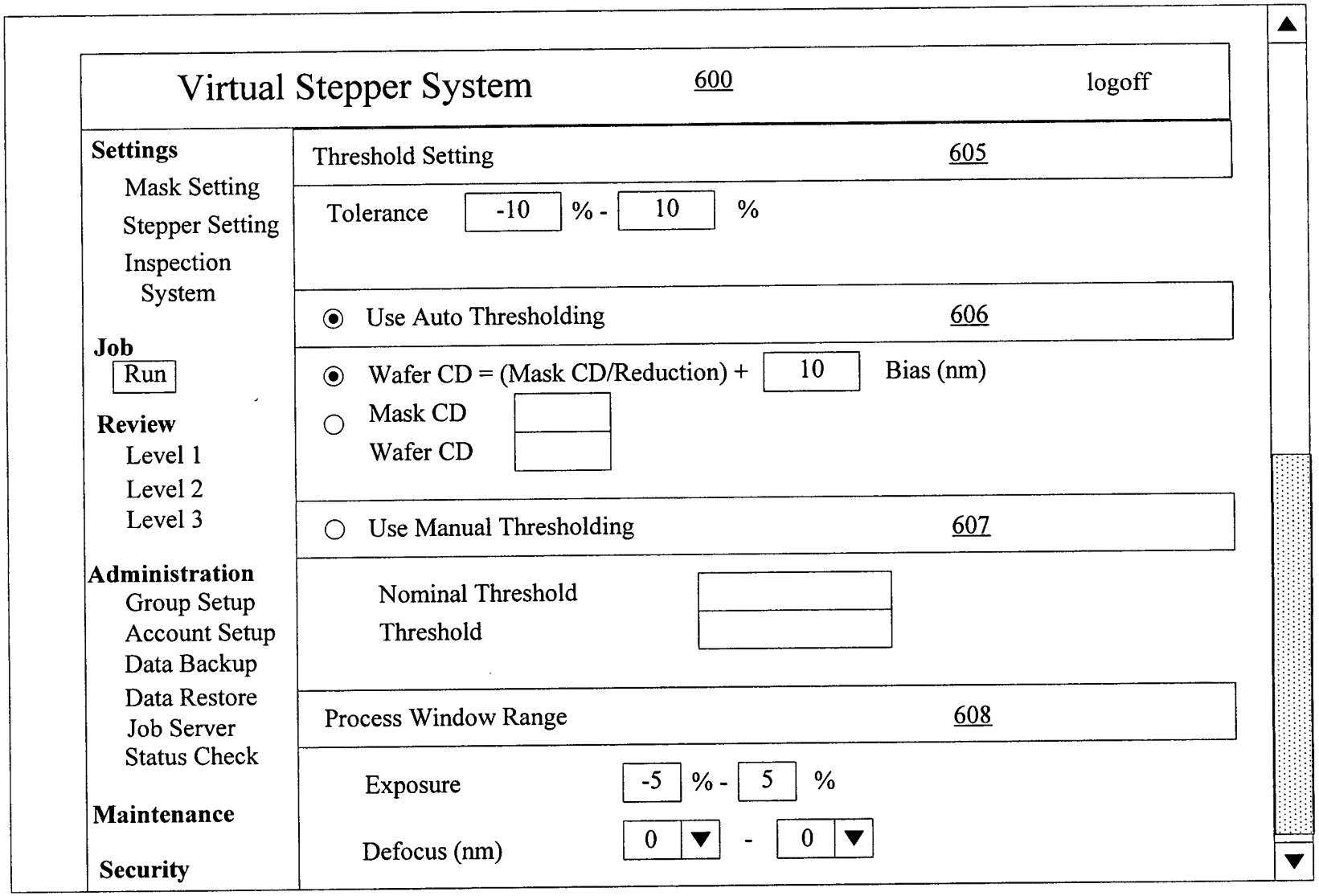
Virtual Stepper System
600
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
Threshold Setting
605
Tolerance
-10
% -
10
%
Use Auto Thresholding
606
Wafer CD = (Mask CD/Reduction) +
10
Bias (nm)
Mask CD
Wafer CD
Use Manual Thresholding
607
Nominal Threshold
Threshold
Process Window Range
608
Exposure
-5
% -
5
%
Defocus (nm)
0
-
0

Figure 6B

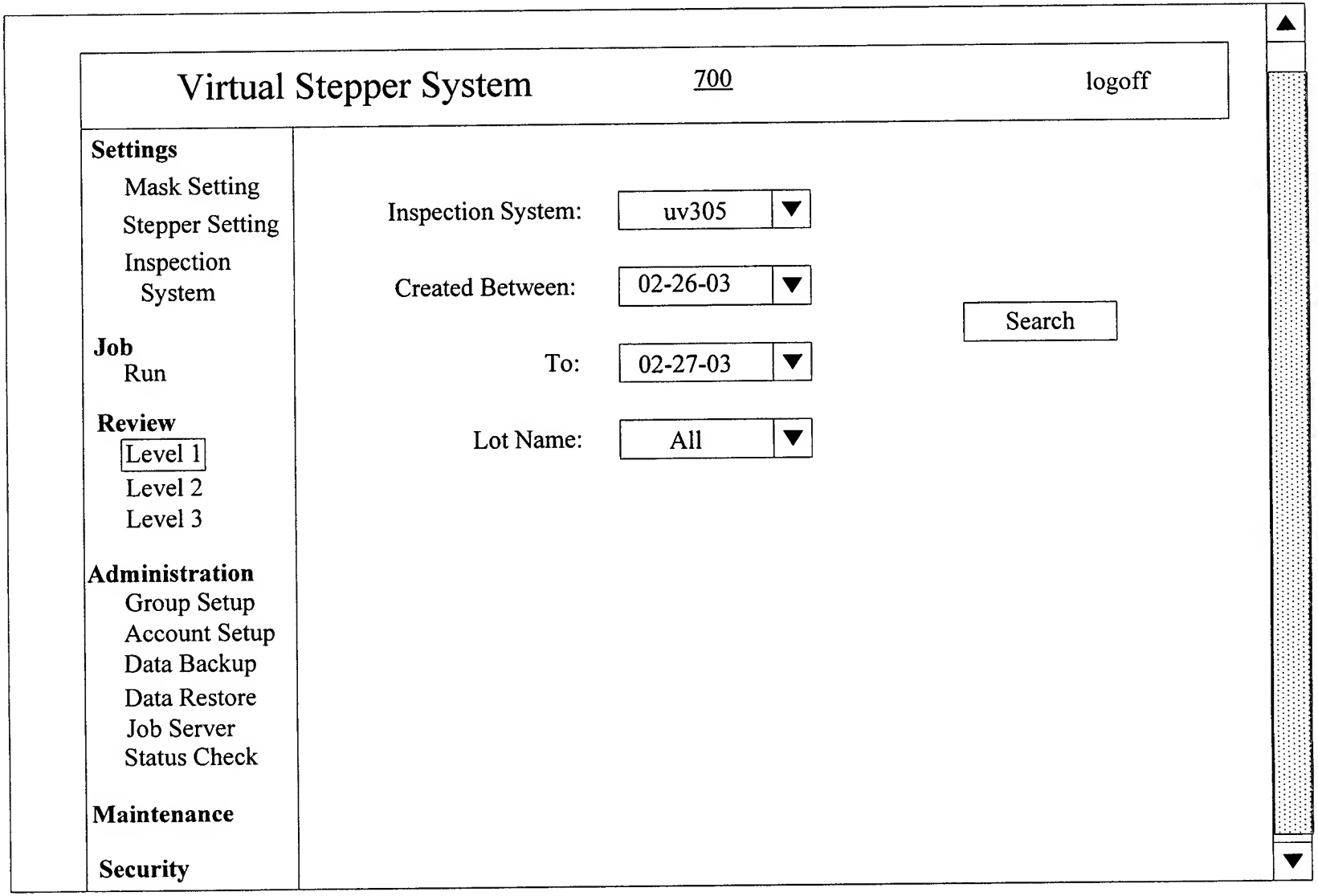
Virtual Stepper System
700
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
Inspection System:
uv305
Created Between:
02-26-03
To:
02-27-03
Lot Name:
All
Search

Figure 7

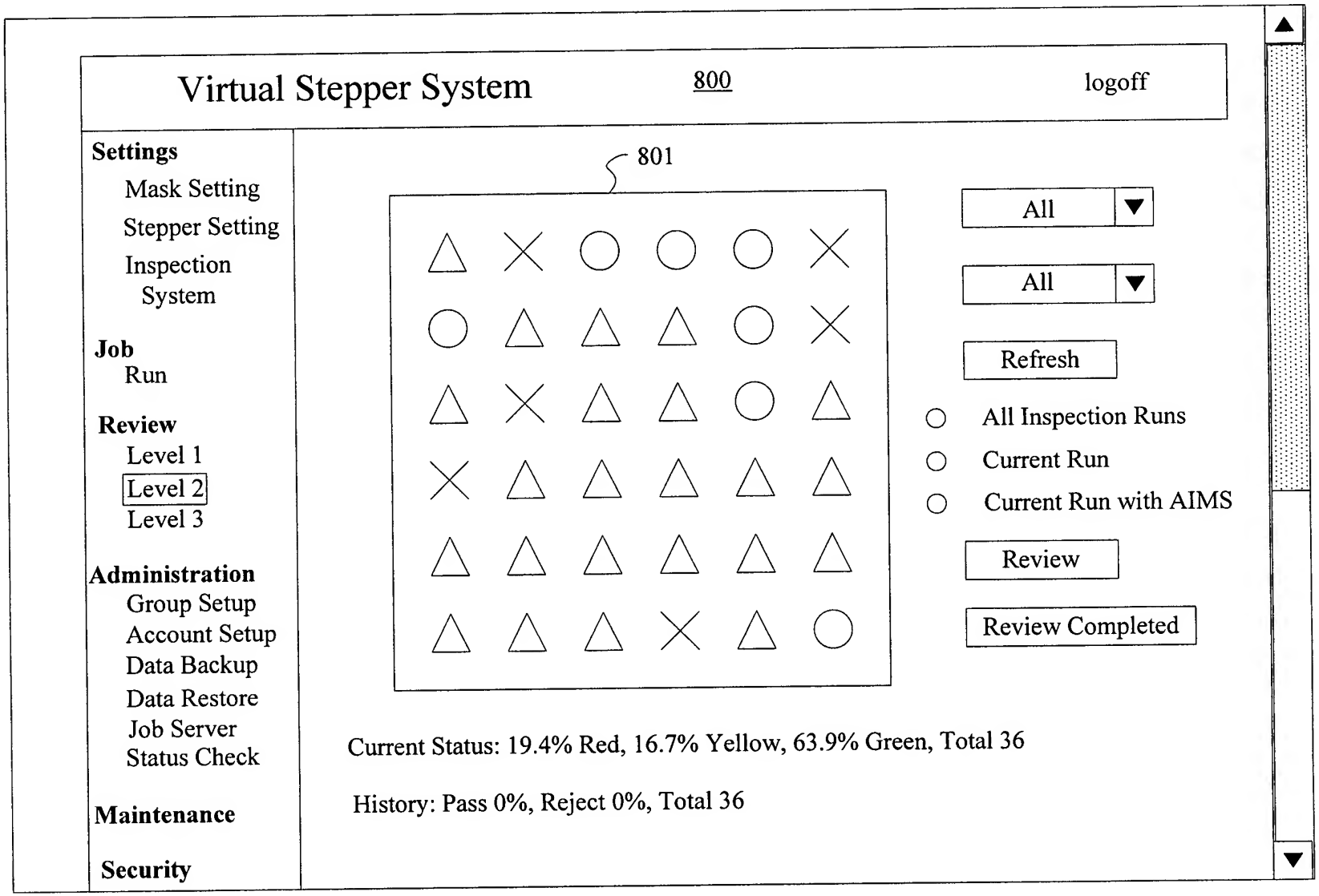
Virtual Stepper System
800
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server Status Check
Maintenance
Security
801
All
All
Refresh
All Inspection Runs
Current Run
Current Run with AIMS
Review
Review Completed
Current Status: 19.4% Red, 16.7% Yellow, 63.9% Green, Total 36
History: Pass 0%, Reject 0%, Total 36

Figure 8

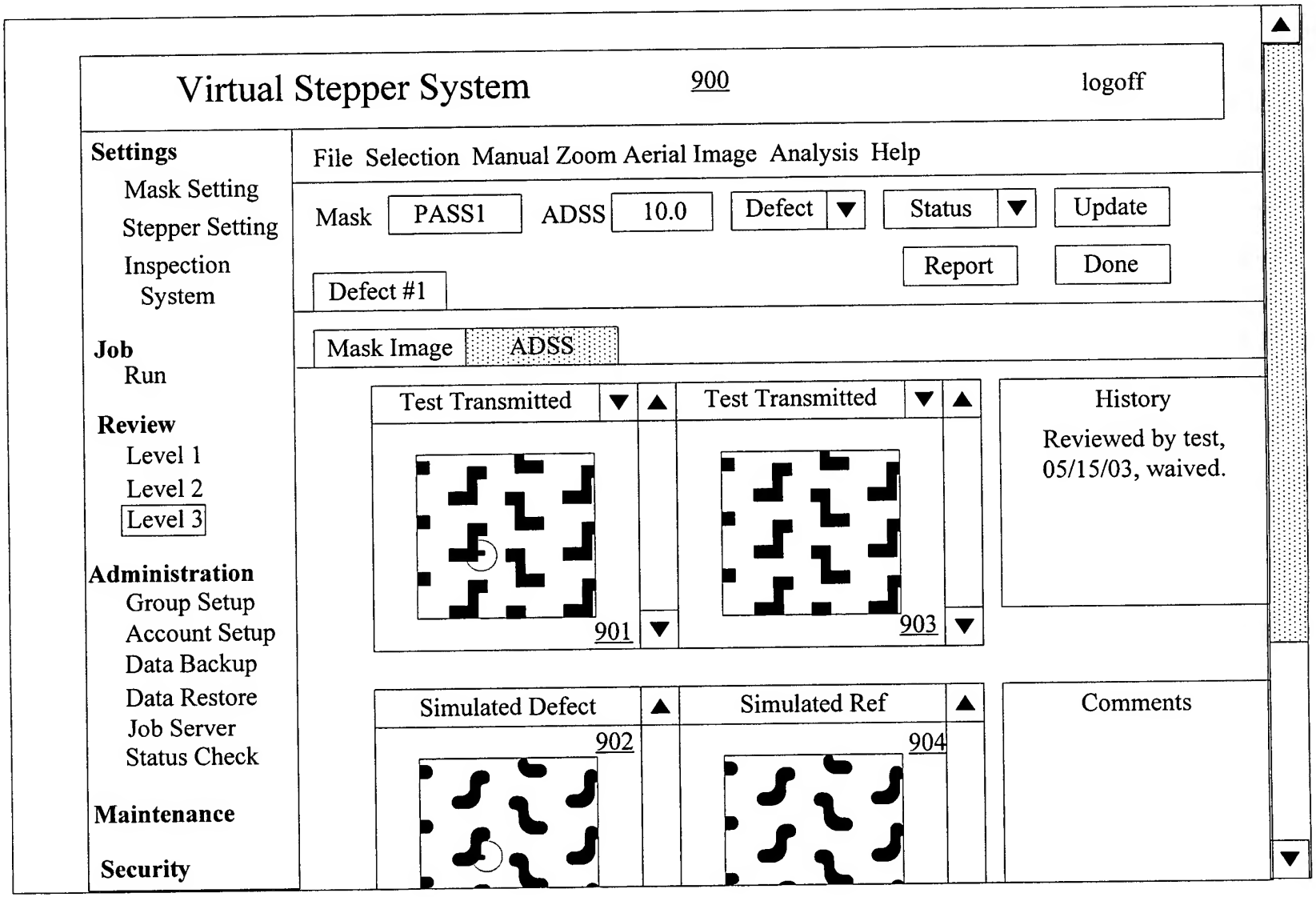
Virtual Stepper System
900
logoff
Settings
Mask Setting
Stepper Setting
Inspection System
Job
Run
Review
Level 1
Level 2
Level 3
Administration
Group Setup
Account Setup
Data Backup
Data Restore
Job Server
Status Check
Maintenance
Security
File Selection Manual Zoom Aerial Image Analysis Help
Mask
PASS1
ADSS
10.0
Defect
Status
Update
Report
Done
Defect #1
Mask Image
ADSS
Test Transmitted
Test Transmitted
901
903
History
Reviewed by test, 05/15/03, waived.
Simulated Defect
Simulated Ref
902
904
Comments

Figure 9

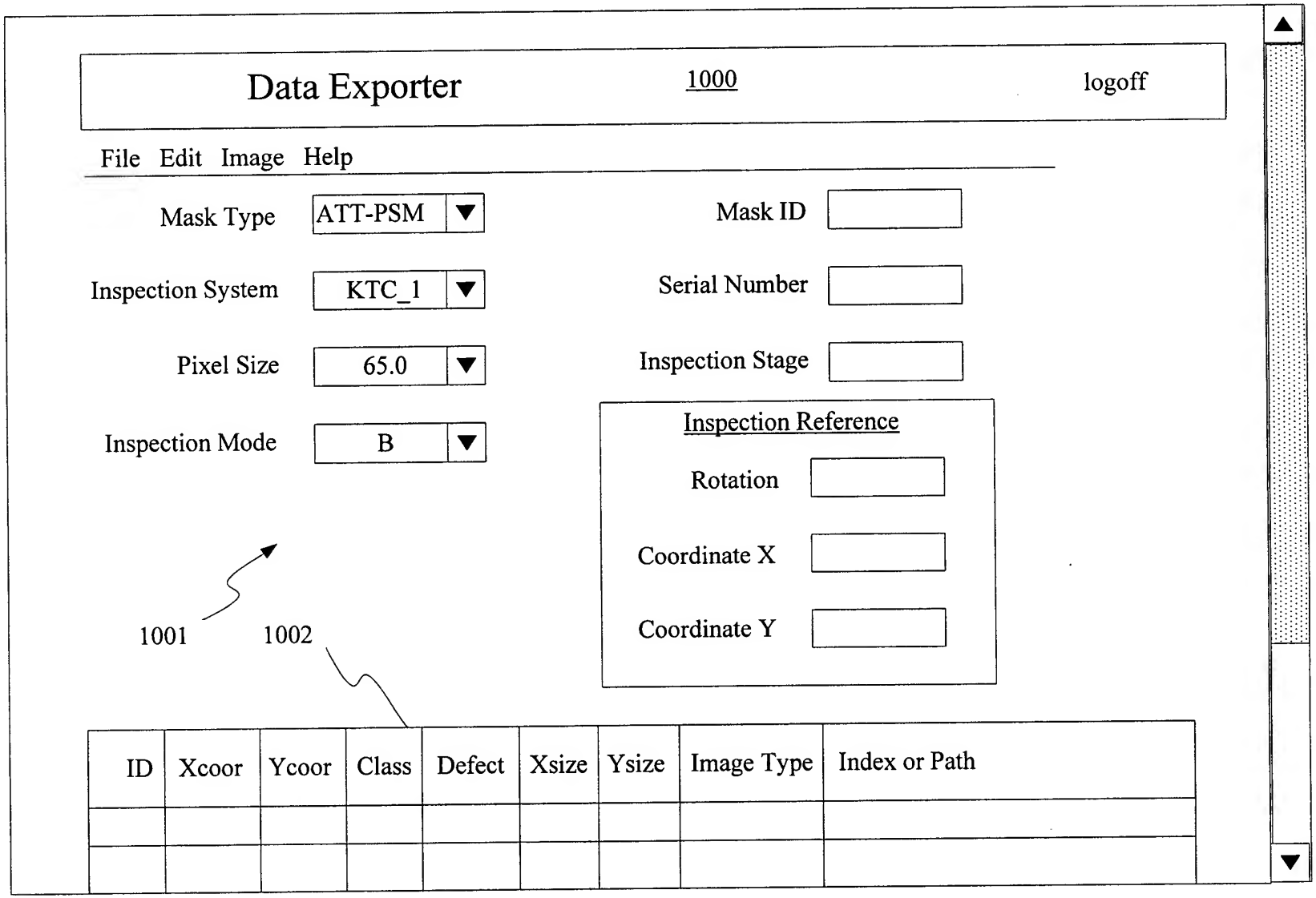
Data Exporter
1000
logoff
File Edit Image Help
Mask Type
ATT-PSM
Mask ID
Inspection System
KTC_1
Serial Number
Pixel Size
65.0
Inspection Stage
Inspection Mode
B
Inspection Reference
Rotation
Coordinate X
Coordinate Y
1001
1002
ID
Xcoor
Ycoor
Class
Defect
Xsize
Ysize
Image Type
Index or Path

Figure 10